

L Number	Hits	Search Text	DB	Time stamp
-	79	laser with gyroscop\$9 with (ring or round or circular\$4 or circle or toroid\$9) and (borehole or (bore adj3 hole) or bottomhole or (bottom adj3 hole) or drill drilling survey surveying)	USPAT; US-PGPUB	2004/05/05 13:04
-	53	gyroscop\$9 with fluid with flow\$4	USPAT; US-PGPUB	2004/05/05 13:04
-	49	(gyroscop\$9 with fluid) and (borehole or (bore adj3 hole) or bottomhole or (bottom adj3 hole) or drill drilling survey surveying)	USPAT; US-PGPUB	2004/05/05 13:04
-	9	gyroscop\$9 with fluid with passage\$6	USPAT; US-PGPUB	2004/05/05 13:04
-	161	(borehole or (bottom with hole)) and gyroscop\$9 same accelerometer and (drill drilling survey surveying)	USPAT; US-PGPUB	2004/05/05 13:04
-	59	((optic\$9 or fiber\$9 or fiberoptic\$9 or fiber\$1 optic) same gyroscop\$9 same (ring or circular\$4 or circle or toroid\$9)) and (drill drilling survey surveying)	USPAT; US-PGPUB	2004/05/05 13:04
-	74	(((((6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324"))).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.)) and gyroscop\$9 same (normal perpendicular\$4 right orthogonal\$4) with (spin\$5 or rotat\$7) with axis	USPAT; US-PGPUB	2004/05/05 13:04
-	20	(((((6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324"))).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.)) and gyroscop\$9 same (tool or instrument or equipment or housing) with (normal perpendicular\$4 right orthogonal\$4) with (spin\$5 or rotat\$7) with axis	USPAT; US-PGPUB	2004/05/05 13:04
-	15	(((((6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324"))).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.)) and (mwd or (measur\$9 adj while adj drilling)) and gyroscop\$9 same (normal perpendicular\$4 right orthogonal\$4) same (spin\$6 or rotat\$6)	USPAT; US-PGPUB	2004/05/05 13:04
-	60	(((((6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324"))).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.)) and (mwd or (measur\$9 adj3 drilling) or measur\$drilling) and gyroscop\$9	USPAT; US-PGPUB	2004/05/05 13:04
-	15	(((((6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324"))).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.)) and (mwd or (measur\$9 adj3 drilling) or measur\$drilling) and gyroscop\$9 same (normal perpendicular\$4 right orthogonal\$4) with (spin\$5 or rotat\$7) with axis	USPAT; US-PGPUB	2004/05/05 13:04
-	136	(((((6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324"))).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.)) and gyroscop\$9 and (tool or instrument or equipment or housing or case or casing or shell) with (spin\$5 or rotat\$7) with axis	USPAT; US-PGPUB	2004/05/05 13:04

-	32	("3753296" "4199869" "4345454" "4433491" "4468863" "4471533" "4472884" "4542647" "4559713" "4594790" "4611405" "4682421" "4706388" "4709486" "4761889" "4819336" "4833787" "4894923" "4909336" "4920655" "4956921" "4999920" "5155916" "5321893" "5432699" "5435069" "5452518" "5564193" "5623407" "5657547" "5679894" "5806194").PN.	USPAT	2004/05/05 13:04
-	26	((("6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324")).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.) and (tool or instrument or equipment or housing or case or casing or shell) with (spin\$5 or rotat\$7) with axis and (gyroscop\$9 same (tool or instrument or equipment or housing or case or casing or shell) with (normal perpendicular\$4 right orthogonal\$4) with (spin\$5 or rotat\$7))	USPAT; US-PGPUB	2004/05/05 13:56
-	15	((("6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324")).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.) and (mwd or (measur\$9 adj3 drilling) or measur\$drilling) and (gyroscop\$9 with (normal perpendicular\$4 right orthogonal\$4) with (spin\$5 or rotat\$7))	USPAT; US-PGPUB	2004/05/05 13:04
-	21	(mwd or (measur\$9 adj3 drilling) or measur\$drilling) and (gyroscop\$9 with (normal perpendicular\$4 right orthogonal\$4) with (spin\$5 or rotat\$7))	USPAT; US-PGPUB	2004/05/05 13:04
-	34	((("6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324")).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.) and (earth with rotation) and ((local or frame) with orient\$7)	USPAT; US-PGPUB	2004/05/05 13:04
-	6	((("6021577") or ("5787997") or ("5452518") or ("5435069") or ("5294972") or ("5155916") or ("5012412") or ("4812977") or ("4712306") or ("4682421") or ("4594790") or ("4542647") or ("4450406") or ("4371838") or ("4361192") or ("4163324")).PN.) 33/302 33/304 33/308 33/310 33/312 33/313 33/324 33/624,625.ccls. ((175/45).CCLS.) and gyroscop\$7 and gyroscop\$7 same rotat\$9 same pitch same axis and azimuth and accelero\$9 same pitch	USPAT; US-PGPUB	2004/05/05 13:06
-	22	laser with gyroscop\$9 with (ring or toroid\$9) same (center or central\$4) with (bore aperture opening hole)	USPAT; US-PGPUB	2004/05/05 13:07
-	6	(optic\$9 or fiber\$9 or fiberoptic\$9 or fiber\$1optic) with gyroscop\$9 with (ring or toroid\$9) same (center or central\$4) with (bore aperture opening hole)	USPAT; US-PGPUB	2004/05/05 13:07
-	9	(optic\$9 or fiber\$9 or fiberoptic\$9 or fiber\$1optic or laser) with gyroscop\$9 with (ring or toroid\$9) same fluid	USPAT; US-PGPUB	2004/05/05 13:07
-	3	gyroscop\$9 with (center or central\$4) with (bore aperture opening hole passage passageway) with fluid	USPAT; US-PGPUB	2004/05/05 13:07
-	25	((fiber\$9 or fiberoptic\$9 or fiber\$1optic) same gyroscop\$9 same (ring or circular\$4 or circle or toroid\$9)) and (drill drilling survey surveying)	USPAT; US-PGPUB	2004/05/05 13:07
-	74	(borehole or (bottom with hole)) and gyroscop\$9 same accelerometer and (drill drilling survey surveying) and velocity	USPAT; US-PGPUB	2004/05/05 13:07
-	19	(borehole or (bottom with hole)) and gyroscop\$9 same accelerometer and (drill drilling survey surveying) and velocity and kalman	USPAT; US-PGPUB	2004/05/05 13:07
-	19	gyroscope same accelerometer and angular\$6 same rotat\$7 same accelera\$7 same (coordinate adj2 system)	USPAT; US-PGPUB	2004/05/05 13:07
-	75	((fiber\$9 adj optic\$9) or fiberoptic\$9 or fiber\$1optic) same gyroscop\$9 same advantages	USPAT; US-PGPUB	2004/05/05 13:07
-	269	(two or (first and second)) same gyroscop\$9 and accelerometer same (vertical\$5 or plumb or gravity or gravitational)	USPAT; US-PGPUB	2004/05/05 13:07